THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. XIII.] Wednesday, September 30, 1835. [NO. 8.

THE CRUSTA GENU EQUINÆ IN EPILEPSY.

ON THE CRUSTA GENU EQUINÆ (SWEAT OR KNEE SCAB, MOCK OR ENCIRCLED HOOF KNEES, HANGERS, DEW CLAWS, NIGHT EYES, OR HORSE CRUST), IN EPILEPSY.

BY JOHN P. METTAUER, M.D. OF PRINCE EDWARD CO., VA.

In communicating to the medical public our experience with a new medicinal agent, the wish to abridge human suffering in a most afflictive disease, and not to swell the catalogue of remedies, already too extensive, has been the governing motive.

We do not appear before our brethren as *innovators*, but as fellow laborers; tendering to the common stock the fruits of our little experience with an article, which, although confessedly new to most of the profession, has, nevertheless, been long and familiarly known to us.

The grounds upon which this new agent rests, for at least a favorable consideration of its claims upon the profession are, its successful employment in the cure of some forty or fifty well-marked cases of epilepsy.

The substance designated by the several appellations at the head of this article, is furnished by the horse; four oval secreting surfaces, situated on the inner aspects of the extremities, near the knees, are the parts of the animal from which it is obtained. The secretion is poured out so gradually, and in such small quantities at a time, as not to be observed in its fluid, or even semi-fluid states. The crust is of variable color, as well as density; its exterior is always of a lighter appearance, and harder than the interior, which is dark and soft; it is of a lamellated and fibrous texture, and when broken, resembles dark, soft horn; its odor is very penetrating, diffusible, and peculiar; it is deciduous, and separates gradually two or three times during the year; when prematurely or forcibly removed, the surface from which it is taken sometimes bleeds a little, inflames, and becomes tender and sore.

Our investigations in relation to the peculiar function of the surfaces, or the offices they subserve in the economy of the animals themselves, do not enable us to say much, if anything on this subject. Nothing certain seems yet to have been ascertained as to their uses. Conjecture and an extremely vague and loose tradition, afford the only explanations. The surfaces have been supposed to separate and eliminate from the system, a fluid possessing many of the constituents of sweat, and loaded besides with properties peculiar to itself, which, if detained, deteriorates the health of the animal. The constant and regular discharge of this fluid has been thought necessary for the perfect health of the animal, in promoting a sound state, more especially of the extremities, after-heels, hoofs, and legs, all of which have been supposed to become diseased in some way by obstructions of the surfaces.

Emunctories, somewhat similar, exist on the inner surfaces of the extremities of the swine, near the knees, which, if long obstructed, generally result in lameness and dragging of the posterior extremities; a secretion is continually distilling from them, which, like the crust of the horse, displays the peculiar odor or scent of the animal, more particularly observable when surprised or irritated.

As a *medicinal agent*, the crust has been long known in this part of the country. How it found its way into use as a remedy, is not certainly ascertained. It is conjectured that the coincidence of the horse being observed to bite the crust, and to pass worms from the bowels soon after, suggested it as such, and the conjecture is by no means improbable, when it is remembered that this article was first employed as a vermifuge with that animal. The fœtid odor of the crust, it would seem, might naturally have suggested the idea of its possessing remediate powers, and doubtless did indicate it as a nervine and antispasmodic, after it was supposed to possess vermifuge properties.

We have long known and employed this substance as an antispasmodic; but the merit of introducing it into regular practice, is due to Dr. Joseph Mettauer (the writer's father), who employed it in epilepsy so early as 1782 or 1783. During the last twenty-five years we have enjoyed many and satisfactory opportunities of using the crust as a remedy in epileptic convulsions.

In collecting the crust for medical purposes, it is necessary to attend carefully to its loosening tendency from time to time, or it may fall off and be lost. It may be made to separate a little sooner by gently soliciting, and occasionally by firm compression with a bandage. This should be suffered to remain on after the period of desquamation is near at hand, to prevent the accidental loss of the crust. After it is obtained, it should always be dried a short time in the shade, and then it may be kept for use in a close jar, to prevent, so far as possible, the escape of its volatile properties.

We have to regret our inability to furnish a correct, or even a tolerably satisfactory chemical analysis of the crust; from what has been ascertained, the urate of soda seems to be one of its principal constituents; we are inclined to believe that ammonia, in combination with perhaps the lithic acid, may also enter into its composition, from the peculiar compound odor which it often exhales, much resembling that emitted by common urine after standing some time.

Two forms for administration are only used—the powder and tincture. When the powder is to be used, it should always be freshly prepared, either by pounding and rubbing the dry crust in a mortar, or by grating it with a common nutmeg grater; this last process will be found (generally) most convenient, as it enables the practitioner to reduce it, at once, to a very fine and equable powder, even if the crust is imperfectly dried.

The tincture is prepared by simply digesting the broken or powdered crust in diluted alcohol, or common brandy, exposed to a gentle heat for eight or ten days, in the proportions of one part of the former to four of the latter.

The doses of the powder vary from two to twenty grains ; it may be given diffused in any liquid which the patient fancies. With young patients it is safest to begin with the minimum, and increase very gradually to the maximum doses. Should the disease yield before the largest doses are reached, no further augmentation need be made. When the tincture is employed, from ʒss. to ℥iss. are its extreme doses. Diluted with water and sugared, it may be given with very little difficulty to the youngest subjects, as it is tasteless, and in a great measure inodorous. In this form, also, the doses should be very gradually increased, to prevent, as far as possible, the danger of exciting the system too much, which might result from the menstruum, should the doses be suddenly augmented.

Possessing properties perfectly analogous to the crust, and employed with the same intention, and in nearly similar doses and forms, we will mention the parings of the hoof. In some cases it has been thought more efficacious than the crust itself. We have used it frequently in the form of tincture in the proportions of one part hoof to two of spirits, with complete success. A favorable result from the use of this remedy (which we had prescribed in a case of epilepsy), has been communicated to us since commencing this essay. Extreme doses, ʒj. to ℥ij.

The administration of the crust should always be preceded by a purgative or aperient. This step is designed to prepare the system for the action of the remedy, which it effects by unloading the intestines of vitiated secretions ; increasing at the same time the nervous susceptibility of their mucous membranes to remediate impressions, and by determining from the head.

Aperients, or the milder purgatives, should be employed, and generally preferred in those cases of epilepsy distinguished by slight aberrations in the animal economy ; in such examples the pulse, bowels, and skin are very nearly in the condition of healthy organs ; the paroxysms are short and transitory, succeeded by little or no coma, or even drowsiness. In cases marked by symptoms of greater violence, in which a decided inflammatory or congestive character predominates, cathartics should be used ; to be varied in activity and strength, in proportion as the symptoms partake more or less of acute characters ; these are to be repeated until a decided impression is made. Cases of this latter description sometimes require V. S. also, and when this remedy is employed, blood should be always detracted from one or both of the external jugulars, if possible. Occasionally mercurials alone, or in combination with antimonials, are required.

In the first description, or milder cases of epilepsy, some preparations of rhubarb, or rhubarb itself, should be preferred. In the more violent cases, a combination of aloes, scammony, and jalap, has generally been found most suitable ; of each from two to five grains. Calomel with tart. antim. may be added, should the biliary secretion prove very defective, in proportions of two to four grains of the former, and one-fifth to one-third of a grain of the latter. These are to be repeated daily, or once in two days, until the circulation is balanced, the encephalic congestions in a measure dislodged, and the sympathies restored. These preparatory steps having been premised, the crust may be commenced with.

The form or preparation is to be determined by the peculiarities of constitutions, or the complications which modify the disease. Should the case occur in a constitution displaying a highly wrought sanguineous development, the crust in simple powder will be most applicable, and should be preferred.

It will be safest to begin with the remedy at night, and as soon after the disturbances of the preceding paroxysms have subsided as possible. When given at night for the first time, it is more certainly retained by the stomach, and patients, too, are less averse at this period of the day to the taking of an offensive remedy, very probably because the gastric organ is rendered less fastidious by the action of food and drinks upon it during the day.

With young subjects from six to eight years of age, two grains will, in a majority of cases, constitute the commencing dose. We have never used it with patients younger than six years, or older than thirty. Older patients, say from eight to twelve, or fifteen years of age, will bear four or five grains, or even larger doses in the commencement, and with such it may be more suddenly increased to the maximum doses, without gastric disturbances. The remedy rarely offends the stomach when the foregoing precautions are properly attended to; on the contrary, it seems rather to compose and tranquillize this organ. Three doses, in a majority of cases, are as many as will be required in the twenty-four hours. Should cases occur marked by convulsions of unusual violence, with frequent paroxysms, it may be given oftener. From many trials with this article, it has not been perceived that there is much diversity of effect when employed in large or medium doses with young subjects.

Cases requiring the tincture, differ from those already noticed, chiefly on account of the more strongly marked lymphatic developments, with which they are associated; in such examples of epilepsy, a decided hydropic diathesis not unfrequently obtains; the adipose textures generally, but more especially of the skin, are disposed to bloat a little, with universal pallidness and reduced temperature; the secretions from the skin, bowels and kidneys, are generally defective; the pulse is occasionally slow, feeble, and soft, but more frequently it is preternaturally active and corded, from the nervous mobility generally attendant upon imperfect sanguification; such patients are nearly always languid and sluggish, and often require diffusible stimuli to rouse the enfeebled energies, both of body and mind, to something like a comfortable state of excitation; with such subjects, the approach of the paroxysm is more gradual, and may, in many instances, be foreseen for hours, and sometimes days. To this complication of epilepsy, the tincture is most happily adapted, as it presents the remedy in the form best calculated to act promptly, as well as to meet the several indications of cure. It should (as advised with regard to the crust in substance) always be commenced with at night, and in the minimum doses; from ʒss. to ʒiss. may be given, properly diluted, three or four times during the day. Being less permanent in its effects, the tincture should be given more frequently than the crust in substance, especially if the symptoms are urgent; these doses may be repeated with safety as often as once in three or four hours.

Occasionally in this form or complication of epilepsy, it becomes necessary to employ tonics, either mineral or vegetable, or perhaps both, before the tincture (or powder) can be given with the least benefit. By invigorating the organic tone, upon which the normal functional actions materially depend (especially of the digesto-nutritive systems), our agent is enabled the more effectually to produce its specific remediate excitation. That debility exists in these cases, may be inferred from the general anæmial aspect of such patients, as well as from the marked benefits following the use of tonics. It is an observation worth remembering (the truth of which has been often verified in the course of our practice), that nervines rarely benefit when the organic tone is greatly depressed; like mercurials, they are more certainly remediate, under certain circumstances of energy of the organic vitality; depressed (or exalted), inordinately, both fail of their remediate effects.

Should costiveness supervene (which will be often the case), a combination of scammony, aloes, and rhubarb is to be used, in doses of from two to four grains of scammony, about the same proportion of aloes, and from four to eight grains of rhubarb, made into pills. This compound should be given at night, and the doses so managed as to elicit only one or two evacuations, the design not being to purge freely. In restoring the solubility of the bowels, we know of no combination so well suited to such cases as the one just recommended; its action is gentle, but effective, particularly in eliciting the biliary secretion, upon which circumstance the peristaltic movements of the intestines are mainly dependent.

The crust, administered in either of its forms, should be suspended during the employment of aperients or cathartics; and should not be resumed, until, at least, the active cathartic movements subside. To correct the acidity which is occasionally present in this form of epilepsy, it has been found necessary to employ alkaline absorbents; and for this purpose a weak lixivium of hickory, or grape-vine ashes, has seemed to answer best: it should be prepared by mixing one heaping tablespoonful of the ashes in a quart of water; of the clear liquid, from ʒss. to ʒj. may be taken two or three times daily, after eating, or as often as may be found necessary, without irritating the bowels, which it will sometimes do if continued too long.

In both modifications of the disease, the diet should be particularly attended to during the whole course of the treatment, and indeed for some time after the cure may be supposed to have been effected. In the sanguineous variety it should be decidedly abstemious; animal or oily substances are to be inhibited: cooked farinaceous articles; some of the soft pulpy fruits; molasses; and occasionally, thin animal broths will be found most suitable; very little food of any kind should be taken into the stomach after 2 o'clock, P. M. The epileptic patient should always retire to bed with the stomach nearly empty.

In the lymphatic complication, some latitude in diet may be allowed; that is, animal substances, moderately coagulated, and of a purely muscular character, may (after the bowels are *regulated*) be used in small quantities; should acidity abound, or a tendency to it in the stomach be discovered, the use of animal food is not only allowable, but particularly applicable.

As auxiliary means in the cure, the earliest attention should be given to uniformity of temperature ; the skin should be well protected against the unequal action of cold, during every stage of the treatment, and for this purpose the wearing of flannel next the skin should be directed. Thus protected, under all circumstances of climate and exposure, the individual may (as it is requisite he should do) indulge in moderate exercise, and even pursue many of his ordinary avocations, with comparative safety. This suggestion will not be regarded as supererogatory, when it is recollected that epileptic attacks often originate in a want or neglect of comfortable clothing ; and every practitioner much conversant with the disease must have witnessed relapses from exposure to the causes of catarrh.

The remedy which we have been considering should be discontinued or suspended upon the accession, and during the continuance of any new or acute diseases ; and when resumed should be commenced with, in medium doses.

Employed in either of its forms, the crust should be continued perseveringly, until a cure is effected, or a satisfactory trial of its powers has been made. In no disease which "flesh is heir to," is it more important to inculcate patience during treatment than in epilepsy, and the failures of medical practitioners in contending with it, are to be attributed to the disregard of this admonition, rather than to the incurable nature of the disease; we might mention, also, a want of confidence in remedies, among medical men, as an obstacle in the way of satisfactory trials. In every successful case our remedy should be continued some time after the convulsions have ceased to return ; the patient cannot be considered cured until the general health too is restored, even if the convulsions have long subsided.

It is not pretended that the crust will prove remediate in every case of epilepsy, nor even in all such examples as are idiopathic ; some of these may be so strongly engrafted upon the system, from long continuance of the disease, as to have become completely constitutional and fixed, and necessarily irremediable. In the cases connected with organic lesions of the skull or brain (could they possibly be distinguished), we should never advise the crust ; but as it must be confessed that such cases cannot be discriminated, it will be safest in every instance to give the remedy a fair trial (more especially as it is not likely to aggravate the incurable cases), and such has uniformly been our custom.

In obstinate cases the crust should be continued for more than a year before it is to be discarded, or the case abandoned as incurable ; both forms should always be employed and used alternately.

The crust in form of tincture is also a valuable nervine and antispasmodic in hysteric convulsions, and indeed in hysteria generally. In that variety, connected with or proceeding from uterine irregularities incident to sterile married (or unmarried) females, it will be particularly serviceable ; with such the paroxysms most strikingly resemble epilepsy.

The singular efficacy of the crust in the treatment of epilepsy, its mild and peculiar qualities, taken in connection with the violent characters of the disease, have suggested the following pathological views and rationale of the action of the crust.

Epilepsy originates generally in infancy, and is to be esteemed rather a state of quiescent, than active disease, in which all the essential properties exist, the convulsions only marking that stage which should be regarded as its most active, or the spasmodic stage.

In the quiescent, as well as the actively spasmodic stages, irritation seems to obtain, and doubtless constitutes the pathological condition of the textures involved ; it is not only the primary pathological condition of the tissue, but exists in different degrees in every stage of epilepsy, from the quiescent to the convulsive, and it is from this also that the morbid susceptibility results ; it originates primarily in, and is chiefly confined to, the sentient extremities of the gastro-intestinal and encephalic nerves, in their motory relations with the muscles ; it may result from, or be connected with, certain congenital organizations, peculiar to large heads, with or without precocity of intellect ; or gastro-intestinal irritation, from the presence of worms, crudities, &c. or from dentition, or possibly all may be present and necessary to complete the epileptic liability. That a remarkable irritative excitability of mind and body, can be distinguished in a large majority of epileptics, both before and after the convulsions, will be conceded by all who are conversant with the disease. This irritation may also be the cause of those extraordinary developments of the brain and intellectual faculties in infancy and childhood. Once impressed, it is kept up and perpetuated by the numerous and diversified irritating causes incessantly acting upon infantile systems, and occurring while the textures are unfolding and organizing their respective vitalities ; it may in some degree become incorporated with the structures themselves, as one of their properties.

Instituted in either of the nervous extremities, the irritation (or convulsive susceptibility) is extended to the other, thus completing the epileptic liability, or the passive stage of the disease. Why the irritation of the passive stage invites, and subjects the system to active spasmodic movements, cannot be satisfactorily explained, unless we are permitted to suppose that the peculiar or motive nervous tissue in which it originates, and the excitation from which it seems to result, may impart to it this character or tendency. Originating in the nerves, the convulsive movements are extended to the muscles by the operation of new or irritating causes.

The epileptic susceptibility in a majority of cases, is first to be traced in the nerves of the gastro-intestinal mucous membranes ; and is manifested by the early and frequent production of convulsions from ingesta, crudities, worms, &c.

As the intellectual organizations become more fully developed, the susceptibility may also be perceived in them, and now it is that mental and moral causes may become the instruments of epileptic convulsions.

According to the foregoing views, epilepsy consists of two stages, the passive (or what has generally been regarded the predisposing), and the active, or convulsive, stages ; they differ only in the degrees of violence and extent of the irritation, which is to be regarded as a unit. In the passive stage, the irritation seems to be confined chiefly to the sentient extremity, while the intermediate prolongations of the nerves are only invaded by a less degree, or the predisposing irritation ; in the convulsive, all the organs and textures usually involved are equally irritated and excited. "Convulsions are not the disease, they are only symptoms of disease." In epilepsy they are not to be regarded as the disease itself, but the convulsive stage of it.

From the numerous post obit reports of cerebral lesions and morbid appearances connected with epilepsy, it is not by any means established that the disease results from such local affections. Esquirol himself, although enjoying the most favorable opportunities for investigating the subject, has not been willing to refer the disease to an appreciable or definite cause, or to deduce the pathological conditions of the structures from the records of morbid anatomy. Lesions without epilepsy, similar to those met with in epileptic bodies, have been discovered in the brain, according to the researches and reports of Wepfer and Lorey, from which it may fairly be inferred that they are not invariable concomitants, as cause and effect. Such lesions are to be regarded "rather as the consequences of epilepsy than its causes." Our conviction is, that convulsive irritation of the sentient extremities, as well as the intermediate prolongations of the gastro-intestinal and encephalic nerves in their motive relations, generally induced by the action of occasional irritants upon the infantile constitution, is the essential pathological condition upon which epilepsy depends, in a very large majority, if not in all of the cases.

The action of the crust in arresting and curing epileptic irritation, doubtless commences in the sentient extremities of the nerves of the gastro-intestinal mucous membranes; the remediate excitation it induces, differs essentially from irritation; it is the action of a nervine stimulant, exciting the irritated organism equally and pleasantly; the remedy may be regarded as a nervine roborant; the action is also antispasmodic, and approximates in its nature to the movements of health; and if the remedy be continued, it generally becomes the predominant excitation. Being the predominant action in the sentient extremities of the gastro-intestinal nerves, the brain is soon brought into sympathy, which reflecting back upon these textures, a corresponding action not only fixes it in them as determined and established, but also in every other similar texture. In this, as in all other cases of remediate medication, the action begins in the part to which the agent is first applied, and the brain reflecting it back upon the organs first excited, or such others as may stand more particularly related to it, by natural or acquired sympathetic ties, determines and fixes the location of it. The primary excitations and the textures, whether in the establishment of diseased, remediate, or healthy actions, determine their character, while the brain fixes their locations. Morbid excitations do not always continue in their primary seats, but are directed and determined occasionally by the brain to other parts which chance to be more strongly predisposed, and consequently more intimately connected with, and influenced by it. Remediate impressions are also liable to a similar transfer, and cases have occurred in which such excitations have been determined and translated to the primary seats of irritation, greatly to the aggravation of the disease.

The action thus set up by the operation of the crust, and continued by re-applications of the remedy, becomes more and more firmly fixed and established by the associations which it is continually and progressively forming in the system; at length becoming predominant, it merges, or is lost in the actions of health. In this way we would explain the operation of remedies generally; when failures result, remediate agents either have not been appropriately selected, or regularly and faithfully employed, or the primary irritation has been of such a violent nature, or so firmly engrafted in the textures and organs, as to be immoveable, and consequently irremediable, under any system or course of medication.[*]

OPHTHALMOLOGY IN GERMANY.

From the report of the Ophthalmological Clinique at the School of Wiener, during the session of 1832—3, by Dr. Rosas, we gather some interesting particulars in regard to diseases of the eye, and their treatment, in one of the best schools in Germany.

The number of patients treated in the course of the year, comprised in the report, amounted to 1067, of whom 153 were permanent patients, and the rest, 914, were dispensary patients. Of the permanent patients, 92 were males, and 61 were females. The periods of life comprehending the greatest number of patients, were the ages ranging from 10 to 20 years, and from 20 to 30. The forms of disease may be distinguished under the following heads:—

Erysipelas of the lids	2	Inflammation of the globe of the eye	30
Ptylosis	2	Erythismus of the eye	1
Encysted abscess	1	Gutta serena	13
Ulceration of the lids	2	Hydrops oculi	1
Entropium	1	Closure of the pupil	5
Inflammation of the edges of the lids	2	Wound of the cornea	1
Coloboma	1	Cataract	42
Conjunctivitis	23	Staphyloma cornea	8
Trachoma	1	Exophthalmia	2
Inflammation of the lachrymal gland	1	Medullary fungus of the retina	1
Abscess of the lachrymal sac	1		

The *ulcers in the substance of the eyelids* were both of a syphilitic nature. In the first case, a cure was obtained in a short time by the use of calomel internally, and of a lotion containing one grain of corrosive sublimate in 11 oz. of water. The other had destroyed half the lid, and was complicated with similar ulcers in the cornea and throat; here also the disease was cured by the internal administration of corrosive sublimate, and a wash composed of 1½ gr. of sublimate, to 3 oz. of water and half a scruple of tincture of opium.

An *entropium of both lids*, in a female 34 years of age, was cured by touching the relaxed tissues of the lids with concentrated sulphuric acid, in a line parallel to its edge.

The *inflammations of the conjunctiva* which presented themselves may be distinguished thus:—catarrhal, 5; catarrho-rheumatic, 10; varioloid, 1; morbillous, 1; and scrofulous, 6. They did not present anything worthy of remark.

---

[*] The above article was published in the August No. of the American Journal of the Medical Sciences. It is republished in this Journal, by request of the author, on account of several important typographical errors which escaped the notice of the respected editor of our cotemporary periodical.

A *fistula lachrymalis* on both sides, of scrofulous origin, occurred in a patient of sixteen years of age. At the commencement some leeches were applied to the nose, and the patient inhaled some emollient vapors, and was well purged. The red precipitate ointment was then rubbed twice a day on the inner angle of the eye, and a few grains of calomel were given every day, and revulsives were applied to the neck. The contents of the sac were washed out frequently every day, and the disease was cured within three months, without its being necessary to have recourse to any mechanical means.

The *rheumatic ophthalmiæ* were treated by repeated leeching, mercurial frictions, revulsives to the neck, and calomel given internally. The inflammation was generally subdued within from four to eight weeks.

In one case, where *erethismus* of both eyes remained, the disease was removed by the constant application of mineral magnetism. In another case of erythismus, of a scrofulous nature, a perfect cure was obtained in a short time by the use of calomel and jalap, succeeded by the employment of *Decoc. Althææ cum Extract. Hyos.* The *Extract of Belladonna* was rubbed on the eyebrow, and the *Empl. Tart. Emet.* was directed to the neck.

One of the cases of *amblyopia* presented itself in the person of a locksmith, twenty-nine years of age. The disease was of a congestive character, and produced by hard drinking. The use of leeches, saltpetre ʒss. to two drachms daily, and strict antiphlogistic diet, obtained a cure within three weeks.

A case of complete *amaurosis*, which occurred in a tanner forty-seven years of age, is worthy of notice. For sixteen years the patient had been perfectly blind; this state was preceded by violent pain in both eyes. In the year 1832 he entered the hospital, and was so much improved by acupuncture, as to be able to distinguish light and darkness. The treatment was now interrupted for two months, on account of the vacation, and on the 11th of October the supra-orbital nerve of the right side was acupunctured. During the operation the patient perceived some sparks in the eye, and on the 11th, when it was repeated, he felt a slight shivering along the vertebral column. On the 13th the left, on the 14th the right supra-orbital, and latterly the infra-orbital nerves, were acupunctured. These were followed by sparks in the eyes and shivering along the spine. On the 17th the galvano-punctor was employed, for the first time, and four plates of Volta's pile were used. The same nerves were touched, and after four minutes the patient felt some febrile *frisson* sparks in the eye, and a flow of tears. On the 19th, after a similar operation on the right side, the patient began to see. On the following morning, the inner moiety of the visual field was somewhat troubled, but within ten hours this phenomenon diminished, and towards evening the patient, to his great joy, could distinguish all large objects.

On the 21st the operation was repeated on the left side for two minutes and a half; his eyes continued watery for the whole day. On the morning of the 22d, all objects were covered with a thick veil, but this soon went off, and the patient could see so clearly with both eyes as to distinguish a small silver coin. The galvano-punctor was re-applied from time to time during the months of November, December, and January. On the 11th of February it was carried to twenty-six plates of the pile; at this time the patient was fully able to distinguish small objects, and even their color, &c.

Cataract was observed in forty-two individuals, twenty-six men and sixteen females; of these 1 was under ten years, 2 were under twenty, 1 under thirty, 3 under forty, 4 under fifty, 13 under sixty, 13 under seventy, and 5 under eighty. Twenty-eight were affected in both eyes; seven in the right and seven in the left eye: the number of cataracts therefore in the forty-two patients was seventy. As to the causes under which the disease was developed, in many cases it arose from frequent attacks of internal ophthalmia; in seven cases from mechanical injury; in two from long working in a very strong light; in one from excess of drink; in seven from rheumatic attacks of the head; in two from gout; in one it was congenital; in twelve the disease could only be attributed to old age; two of these latter individuals were successfully operated on at the hospital some years before. In twenty-eight cases the operation was not performed, on account of various complications, &c. Forty-two cataracts were operated upon; nine by incision of the cornea inferiorly; two with the superior incision, and fifteen with the lateral incision; eleven were lacerated through the cornea, two through the sclerotica, and, finally, three were depressed through the sclerotica. The accidents which occurred after these operations were, keratistis, one case (after extraction); iritis two (after extraction); ophthalmitis five (four after extraction, one after depression); prolapsus iritis one (after extraction).

The success of the forty-two operations was as follows:—

	Cases.	Perfect Cure.	
Extraction—inferior flap	9	7	1 imperfect cure; 1 lost the eye.
Ditto superior flap	2	1	in other, pupil closed by lymph.
Ditto lateral flap	15	14	suppuration of one eye.
Laceration through cornea	11	8	in three absorption was imperfect.
Ditto through sclerotica	2	2	
Depression	3	3	one lost by suppuration.

The number of patients treated in the dispensary was 914; 515 men and 399 women. It is impossible for us to analyze this series, as we have done the former, but we shall notice one or two points: 1st. With respect to age, 263 were under ten years of age; 150 were under twenty; 170 were under thirty; 114 under forty; 83 under fifty; 70 under sixty; 34 under seventy; 23 under eighty; and two were under ninety.

London Lancet.

REMEDIAL POWERS OF THE CEANOTHUS AMERICANUS.

[Communicated for the Boston Medical and Surgical Journal.]

Mr. Editor,—I do not remember to have seen any reference made (medicinally) to the Ceanothus Americanus of Linnæus. Its sensible properties led me to use it in a case of aphthæ, and subsequently in other derangements of mucous surfaces, where I found it of some importance. Prof. Bigelow describes the ceanothus as follows. "Leaves heart ovate, acuminate, triply nerved. Panicles axillary elongated. A small white flowering shrub, not unfrequent in dry sandy soils. Leaves two or three inches long and one broad, finely serrate, and tapering into a long point. From the axils of the upper leaves come out leafless branches bearing crowded bunches of minute white flowers. These are followed by dry three seeded, and somewhat triangular berries. The leaves were used among other substitutes for tea during the American revolution." I might add that the dried leaves and seeds have an odor, when bottled, not unlike imported tea. It has a slight bitter, and somewhat astringent taste. I first used it in case of an old lady of 70, who had a severe thrush following typhus. The usual gargles were tried without much effect. Every 2d or 3d day a new coat of darker hue would cover the whole interior of the fauces. The mucous membrane after its discharge presented a dark florid appearance, with extreme sensibility. I had tried borax, alum, nitras argenti, vegetable astringents and tonics, as gold thread, crane's bill, hardhack, oak bark, sumach, &c. without much benefit. The ceanothus growing near, I directed a strong tea to be made of it, which acted like a charm; the thrush soon passed off, and without relapse. Since then I have used it largely in aphthæ of children, and find it highly useful in cases following dysenteria maligna, as well as those of less debility and disease, even after other gargles have been ineffectually tried. During last March and April, scarlatina, attended in most cases with ulceration of the fauces, was very prevalent with us; I depended almost exclusively upon the ceanothus, with borax for a gargle, and in all but a single case of very malignant character this gargle was effectual. The form I used, and which I found best adapted for the cases as presented, was prepared by making a strong tea of the ceanothus and flowers of Anthemis cotula, and to a gill add a piece of borax the size of a large pea. I think the borax and Mayweed rendered it in many cases more effectual. I have also used it with benefit in form of a tea in dysenteria of children, and found it fully equal in many cases to the Speica tormentosa. The tea I used was prepared from the leaves and seeds.

Bloomfield, Conn. *Sept.* 12*th*, 1835. D. H. Hubbard.

BOSTON MEDICAL AND SURGICAL JOURNAL

BOSTON, SEPTEMBER 30, 1835.

PRESERVATION OF BODIES.

To teachers of anatomy, it is matter of no ordinary concern to understand the most economical method of preserving anatomical subjects. That there is a prodigious loss in the usual routine of daily demonstrations, is familiar to every one who has attended public lectures. While a dissection is going on upon one part, another part equally valuable is totally destroyed by decomposition. When to this is added the uncertainty of a necessary supply, and the danger often apprehended of not being able to make an exhibition of everything which the student has a right to expect, a discovery like that which is about to be detailed, must be of incalculable value.

A committee of the French Academy of Medicine has been experimenting of late, with what is commonly called, in Europe, Gannal's fluid —a preparation proposed by M. Gannal for the preservation of bodies for the dissecting room—and the result of their inquiry is favorable. The mixture is formed in the following manner. Take 2 lbs. of common salt, 2 lbs. alum, 8 oz. nitre, and 40 lbs. of water. The subject to be anatomized is immersed in this. In March last, two bodies were placed in this solution, and left, says the report of the commission, exposed to the putrid exhalations in one of the dissecting rooms of the school. At the expiration of a month, they were changed externally, in appearance, only, it is inferred from the narration, but the internal tissues were sufficiently conserved to be applicable to anatomical purposes. By another experiment, a body, after having been in the liquor for some time, remained fifteen days without exhibiting any signs of putrefaction. This is a point not to be overlooked, inasmuch as it offers a remedy by counteracting a rapid tendency to decay under the circumstances alluded to in anatomical theatres.

It will be remembered that a few years ago, the scarcity of bodies was such at the University of Dublin, that serious fears were entertained that the lectures would be suspended, if some immediate provision were not especially made for sustaining the professor of anatomy. Dr. Macartney, then, as at present, in the chair, devised a composition which was so effectual in preserving portions not immediately in use, that the course of instruction was finally conducted satisfactorily to the close of the term. On a careful comparison of the ingredients of the Dublin brine, with the French liquid, they prove to be essentially the same. Both the superficial and deep-seated nerves of the arm served Dr. Macartney for public demonstration for several months, having previously been subjected to the antiseptic influences of this composition.

In this country, some gentlemen have succeeded in obtaining the same results by a still simpler, if not more economical scheme. To nine gallons of common New England rum, or whiskey, add an equal quantity of water—the whole being sufficient for covering an adult subject in a suitably constructed vessel. We have kept one or two, in this way, an entire year, and found them in most perfect condition for demonstration at the expiration of that time. The muscles were red and compact, and, on the whole, we have no recollection that any difficulty occurred in raising or dissecting the minutest fibres. With regard to the nerves, they were particularly fine and strong. Each night, however, we were careful to replace the whole in the vat, so that it is uncertain how long they might have been kept before becoming unfit for examination.

We have also made trial of pyroligneous acid, but such destruction was made of instruments by it, that, although promising well in theory, it was ultimately abandoned.

From the experience we have had in teaching anatomy, and in the consequent perplexity arising from a scarcity and sometimes unexpected decay of subjects, we have felt that the foregoing remarks might be beneficial—particularly now, as the season has arrived when the study of anatomy can be most advantageously pursued. If, however, any of our professional brethren are in possession of better or less expensive substitutes for those adverted to, they will be doing great service to science by communicating the facts to the medical public.

Strychnine in Cholera.—Dr. C. E. Jenkins, of London, relates his successful treatment of the malignant cholera, which is as follows:—In *any stage* of the disease between the first copious dejection and the collapse, he gives one-twelfth of a grain of pure strychnine, made into pills with crumbs of bread (or, where deglutition is difficult, white sugar, and in this case rubbed into the tongue). This is repeated every quarter of an hour for the first hour, and every half hour for the second and third hour, diminishing the frequency of the dose until the violent symptoms are subdued. The patient's inordinate thirst is gratified with an unlimited allowance of cold water, which is often indulged in to the extent of some gallons. The first *three*, or varying between *three* and *six* pills, are ejected. As soon as the warmth returns, and the vomiting is stayed, a basin of strong beef-tea, or half a pint of good porter (according to the habits of the patient), is allowed, the strychnine relinquished, and the sulphate of quinine administered in doses of two grains every three or four hours.

Apothecaries in Germany.—In some of the German States, particularly Hesse-Cassel, the government will not permit an apothecary who has been two whole years engaged in any other employment, to resume his business without being subjected to a second examination and obtaining a new license for the practice of pharmacy. During the progress of the re-examination, some chemical preparation is required to be made, to show that the individual remembers his manipulations. The capital of Prussia, containing two hundred and fifty thousand souls, has only twenty-eight apothecaries. Nearly the same vigilant eye is kept upon this important class of men, that characterizes the system in Germany. Once every year, the retail drug stores are visited, at an unexpected moment, by a committee of magistrates and physicians, appointed by government, to examine and decide upon the genuineness of the medicines on sale. The laboratory is also minutely inspected. Every error or defect, of importance, subjects the owner to serious embarrassments. One very important regulation is this—viz. that they shall not meddle with medical practice.

Physicians in Prussia.—There are said to be wealthy provinces in that country, where the ratio of physicians to the population, is only one to seven thousand: and in Bohemia, only one to sixty thousand inhabitants. Those German students of medicine who are competent to sustain the rigorous State examinations established by law, which are wholly independent of academical qualifications, engross a prodigious field of practice.

Missionary Physicians.—The mission to the Sandwich Islands has requested the prudential committee to send out two physicians. Under the auspices of the Society, we believe several talented professional gentlemen have already been sent to various parts of the heathen world. This certainly bespeaks a spirit of christian benevolence and kind-hearted philanthropy, deserving the highest possible commendation.

Cancerous Contraction.—The body of a young woman is said to have been lately opened at a hospital in Paris, in the intestines of which no less than 617 cherry-stones were found, confined by a cancerous contraction.

The Royal College of Physicians, London.—The Fellows of this celebrated institution have given great offence to some of its licentiates by the recent enactment of certain by-laws. A petition was presented to the House of Commons on the 17th of August, signed by a committee which includes the names of such men as Marshall Hall, James Copland, N. Arnott, Southwood Smith, &c., in which they complain, that, notwithstanding the original Charter of the College ordains that the Censors are to be chosen by the President and College, or commonalty, the by-laws in question depute to the Council the power of nominating the Censors, and the Fellows are constrained to ballot for those so nominated. The nomination of licentiates for the fellowship is also entrusted to the Council. They consider that the Charter is likewise infringed upon by the proposed mode of choosing the Council thus illegally entrusted with power, which is, they say, "framed on a close and narrow system of monopoly and exclusion."

Smallpox.—Three cases of this disease have recently appeared at Charlestown, in the neighborhood of the Bunker Hill monument, which were promptly removed to the Quarantine Hospital, which, we are sorry to remark, has scarcely been free from the smallpox a week, at any one time, for a year. Most of the patients arrive in vessels from various ports in Europe.

We were informed on Saturday, that thirteen cases also existed at Concord, N. H., and our informant mentioned two deaths. Both at Charlestown and Concord, the disease was introduced by the same individual, who journeyed from New York with a mild varioloid.—A case has likewise occurred at Attleborough, in this State.

Mexican Remedy for Cholera.—M. Chaniac gives the world reason to believe that he has deceived himself in supposing that he has discovered a specific for the cholera, in the guaco plant. He prescribed a decoction given in small cups, until a gentle perspiration was shown upon the skin. A statement by this gentleman, in which wonderful successes are particularized, has already been circulated.

A Treatise on the Epidemic Cholera, by Floyd T. Ferris, M.D. of New York, is announced as in press by the Harpers.

Winter Retreat for those inclined to Pulmonary Consumption.—Dr. Cartwright, of Natchez, has expressed to us the opinion, that the maritime portions of the State of Mississippi, lying below the 31st degree, and between New Orleans and Mobile, constitute one of the best retreats in the United States for persons who are threatened with pulmonary consumption. They, however, in whom the disease is established, should not leave home for that or any other place in the South, as it has appeared to him that a southern climate has rather accelerated than retarded the fate of such patients, which is very much the result of our own observation. The soil and climate of the tract of country, to which we have alluded, are described by Dr. C. as sterile, temperate, and comparatively free from humidity.—*West. Journ. of the Medical and Physical Sciences.*

DIED—At Walden, Orange Co. N. Y., Dr. Seth Capron, 74, a native of Rhode Island.

Whole number of deaths in Boston for the week ending Sept. 26, 51. Males, 25—Females, 26.

Of measles, 6—liver complaint, 3—infantile, 2—decline, 3—erysipelas, 1—intemperance, 2—dysentery, 2—throat distemper, 1—hooping cough, 1—paralysis, 1—old age, 3—cholera infantum, 2—disease of the heart, 1—dropsy of the brain, 1—bowel complaint, 3—drowned, 1—bilious fever, 1—teething, 1—consumption, 6—diarrhœa, 1—lung fever, 2—typhous fever, 2—inflammation of the brain, 1—dropsy, 1—brain fever, 1—scarlet fever, 1.

ADVERTISEMENTS.

WASHINGTON MEDICAL COLLEGE OF BALTIMORE.

The Annual course of Lectures in this Institution will commence on the last Monday of October.

James H. Miller, M.D. Professor of Anatomy, Physiology and Pathology.
Samuel K. Jennings, MD. Prof. Materia Medica, Therapeutics, Hygiene, and Medical Jurisprudence
William W. Hardy, MD. Professor Obstetrics and the Diseases of Women and Children.
John C. S Moukur, MD. Professor Theory and Practice of Medicine.
John P. Mettauer, MD. Professor Surgery and Surgical Anatomy.
Edward Foreman, MD. Lecturer on Chemistry, &c.
Washington R. Hardy, M.D. Demonstrator of Anatomy. This department will be open from the 1st of October.

Sept 16—3t

MEDICAL INSTRUCTION.

The subscribers have associated for the purpose of giving Medical Instruction on the following terms:—

Convenient Rooms well furnished, with access to a good Medical Library, and the necessary facilities for demonstrative Anatomy and Surgical operations.

The privilege of attending at the almshouse and a private hospital, now in successful operation, together with the important cases, both in physic and surgery, which occur in a pretty extensive private practice. Terms—$50 a year.

JOSEPH H. FLINT,
ELISHA MATHER,
AUSTIN FLINT.

Northampton, Mass.

☞ Instruction in modern Dentistry will be given for a small additional compensation.

May 13. eop6m

MEDICAL INSTRUCTION.

The subscribers are associated for the purpose of giving a complete course of Medical Instruction, and will receive pupils on the following terms:

The pupils will be admitted to the practice of the Massachusetts General Hospital, and will receive Clinical Lectures on the cases which they witness there.

Instruction, by examination or lectures, will be given in the intervals of the Public Lectures of the University.

On Midwifery, and the Diseases of Women and Children, and on Chemistry	By Dr. Channing.
On Physiology, Pathology, Therapeutics, and Materia Medica - - - -	By Dr. Ware.
On the Principles and Practice of Surgery - - - - - - - - -	By Dr. Otis.
On Anatomy, Human and Comparative - - - - - - - - -	By Dr. Lewis.

For the greater accommodation of the Class, a room is provided in the house of one of the instructers, having in it a large library, and furnished with lights and fuel, without charge to the students.

The Fees will be, for one year, $100. Six months, $50. Three months, $25.

The Fees are to be paid in advance. No credit will be given, except on sufficient security of some person in Boston, nor for a longer period than six months.

Applications are to be made to Dr. Walter Channing, Tremont Street, opposite the Tremont House, Boston. 6m.

WALTER CHANNING,
JOHN WARE,
GEORGE W. OTIS, Jr.
WINSLOW LEWIS, Jr

Boston, April 1, 1835.

MEDICAL AND SURGICAL EDUCATION.

The subscriber continues to receive medical pupils at the United States Marine Hospital, Chelsea, and to offer them the following advantages.

The institution at present contains seventy beds: all of which are occupied during the autumn and winter by the subjects, both of medical and surgical treatment. The number of patients in the spring and summer is rather less. The average number daily, throughout the last year, was between fifty-five and sixty. The number is annually increasing. A greater variety of disease is thus presented, than is to be found in those hospitals exclusively appropriated to the poor of any city.

The students have unrestrained access to these cases during all hours: as also to the extensive apothecary shop connected with the establishment.

A valuable medical library is offered for their use.

Facilities for the cultivation of demonstrative anatomy, are afforded through the winter.

The students are provided with a suitable apartment in the hospital, which is furnished with fuel and lights, without charge.

Fees, $50 a year.

Board may be procured in the vicinity of the hospital, at from $2,50 to $3,00 per week.

Boston, April 21, 1835. (April 29.—tf.) C. H. STEDMAN.

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR. at 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *post-paid*. J. V. C. SMITH, M.D. Editor. It is also published in Monthly Parts, on the 1st of every month, each Part containing the weekly numbers of the preceding month, stitched in a cover.—Price $3,00 a year in advance, $3,50 after three months, and $4,00 if not paid within the year.—Every seventh copy, *gratis*.—Postage the same as for a newspaper.